SEQUENCE LISTING

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<120> METHODS AND COMPOSITIONS FOR MODULATING LEVELS OF SECONDARY METABOLIC COMPOUNDS IN PLANTS

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<150> US 60/072156

<151> 1998-01-22

<150> US 09/012453

<151> 1998-01-23

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<170> PatentIn Ver. 2.0

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<212> DNA

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<212> PRT

<213> Bacillus pumilus

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Ile His Ser Gly Met Val Gly Gly Arg Trp Val Arg Asp Gln Glu Val
        35                  40                  45

Asn Ile Val Lys Leu Thr Lys Gly Val Tyr Lys Val Ser Trp Thr Glu
    50                  55                  60

Pro Thr Gly Thr Asp Val Ser Leu Asn Phe Met Pro Glu Glu Lys Arg
65                  70                  75                  80

Met His Gly Val Ile Phe Phe Pro Lys Trp Val His Glu Arg Pro Asp
                85                  90                  95

Ile Thr Val Cys Tyr Gln Asn Asp Tyr Ile Asp Leu Met Lys Glu Ser
            100                 105                 110

Arg Glu Lys Tyr Glu Thr Tyr Pro Lys Tyr Val Val Pro Glu Phe Ala
        115                 120                 125

Asp Ile Thr Tyr Ile His His Ala Gly Val Asn Asp Glu Thr Ile Ile
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Ala Glu Ala Pro Tyr Glu Gly Met Thr Asp Glu Ile Arg Ala Gly Arg
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Lys

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<211> 546

<212> PRT

<213> Arthrobacter pascens

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Asp Arg Gly Val Pro Glu Val Leu Gln Leu Asp Arg Trp Met Glu Leu
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Leu Glu Ser Gly Tyr Asp Trp Asp Tyr Pro Ile Glu Pro Gln Glu Asn
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Gly Asn Ser Phe Met Arg His Ala Arg Ala Lys Ile Met Gly Gly Cys
85 90 95

Ser Ser His Asn Ser Cys Ile Ala Phe Trp Ala Pro Arg Glu Asp Leu
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Asp Glu Trp Glu Ser Lys Tyr Gly Ala Thr Gly Trp Asn Ala Glu Ser
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Ala Trp Pro Leu Tyr Gln Arg Leu Glu Thr Asn Glu Asp Ala Gly Pro
130 135 140

Asp Ala Pro His His Gly Asp Ser Gly Pro Val His Leu Met Asn Val
145 150 155 160

Pro Pro Ala Asp Pro Ala Gly Val Ala Leu Leu Asp Ala Cys Glu Gln
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Ala Gly Ile Pro Arg Ala Lys Phe Asn Thr Gly Thr Thr Val Ile Asn
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Gly Ala Asn Phe Phe Gln Ile Thr Arg Arg Ala Asp Gly Thr Arg Ser
195 200 205

Ser Ser Ser Val Ser Tyr Ile His Pro Ile Ile Glu Arg Gly Asn Phe
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Thr Leu Leu Thr Gly Leu Arg Ala Arg Gln Leu Val Phe Asp Ala Asp
225 230 235 240

Lys Arg Cys Thr Gly Val Asp Val Val Asp Ser Ala Phe Gly Arg Thr
245 250 255

His Arg Leu Ser Ala Arg Cys Glu Val Ile Leu Ser Thr Gly Ala Ile
260 265 270

Asp Ser Pro Lys Leu Leu Met Leu Ser Gly Ile Gly Pro Ala Ala His
275 280 285

Leu Ala Glu His Gly Val Glu Val Leu Val Asp Ser Pro Gly Val Gly
290 295 300

Glu His Leu Gln Asp His Pro Glu Gly Val Val Gln Phe Glu Ala Lys
305 310 315 320

Gln Gln Met Val Gln Thr Ser Thr Gln Trp Trp Glu Ile Gly Ile Phe
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Thr Pro Thr Glu Asn Gly Leu Asp Arg Pro Asp Leu Met Met His Tyr
340 345 350

Gly Ser Val Pro Phe Asp Met Asn Thr Leu Arg Tyr Gly Tyr Pro Thr
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Arg Gly Thr Val Arg Leu Arg Ser Arg Asp Phe Arg Asp Lys Pro Ala
385                 390                 395                 400

Val Asp Pro Arg Tyr Phe Thr Asp Pro Glu Gly His Asp Met Arg Val
                405                 410                 415

Met Val Ala Gly Ile Arg Lys Ala Arg Glu Ile Ala Ala Gln Pro Ala
            420                 425                 430

Met Ala Glu Trp Thr Gly Arg Glu Leu Ser Pro Gly Thr Glu Ala Gln
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Thr Asp Glu Glu Leu Gln Asp Tyr Ile Arg Lys Thr His Asn Thr Val
    450                 455                 460

Tyr His Pro Val Gly Thr Val Arg Met Gly Pro Ala Asp Asp Asp Met
465                 470                 475                 480

Ser Pro Leu Asp Pro Glu Leu Arg Val Lys Gly Val Thr Gly Leu Arg
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Val Ala Asp Ala Ser Val Met Pro Glu His Val Thr Val Asn Pro Asn
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Ile Thr Val Met Met Ile Gly Glu Arg Cys Ala Asp Leu Ile Arg Ala
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Leu Ala
545

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cagcagatgg tgcagacttc gacgcagtgg tgggagatcg gcatcttcac ccccaccgag 1020

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<212> DNA

<213> Mesembryanthemum crystallinum

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acaatgtagc atttgtggtt ttctttcaat aaagcatcta ttgtacctct gttatcagtg 1440

tatgatttgc ctttattttt aataacttaa ttttttttt cttgtttata tcca 1494

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<211> 38

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<223> Description of Artificial Sequence: Primer

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<210> 7

<211> 37

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer

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